

DISTANCE EXTENDER AND METHOD MAKING USE OF SAME

ABSTRACT OF THE DISCLOSURE

A distance extender (100, 200) for increasing a distance between a first device (145) and
5 a second device (150) in electrical communication with the first device includes an electrical
cable (130, 230) electrically coupled between the first device and the second device, a first
subsystem (110, 210) electrically coupled to the first end of the electrical cable, and a second
subsystem (120, 220) electrically coupled to the second end of the electrical cable. The electrical
cable includes a first end (131, 231), a second end (132, 232), and a plurality of wires extending
10 between the first end and the second end. The plurality of wires includes a first wire, the first
device generates a data signal and provides an electrical power signal, and the data signal and the
electrical power signal are simultaneously transmitted between the first device and the second
device over the first wire.